Psychology

Course Description: Student will study the development of scientific attitudes, and skills, including critical thinking, problem solving, and an appreciation of scientific methodology. Students will also understand the structure and function of the nervous system in human and non-human animals. The structure and function of the endocrine system, interaction between biological factors and experience and methods and issues related to biological advances will be a major theme of study. Students will also connect the different content areas within psychology science and relate psychological knowledge to everyday life. Students will gain an awareness of the importance of drawing evidence-based conclusions about psychological phenomena and gain knowledge of a wide array of issues from individual and global levels. Finally, students will acquire knowledge of the variety of careers available to those who study psychology.

Scientific Inquiry Domain

Research Methods, Measurement, and Statistics

Students will describe research methods and measurements used to study behavior and mental processes and identify ethical issues in research with human and non-human animals. Students will also explain basic concepts of data analysis.

- P.1 Describe the scientific method and its role in psychology.
- P.2 Describe and compare a variety of quantitative and qualitative research methods including:
 - · Surveys
 - · Correlations
 - · Experiments
 - · Interviews
 - Narratives
 - Focus groups
- P.3 Define systematic procedures used to improve the validity of research findings, such as external validity.
- P.4 Discuss how and why psychologists use non-human animals in research.
- P.5 Identify ethical standards psychologists must address regarding research with human participants.
- P.6 Identify ethical guidelines psychologists must address regarding research with non-human animals.
- P.7 Define descriptive statistics and explain how they are used by psychological scientists.

- P.8 Define forms of qualitative data and explain how they are used by psychological scientists.
- P.9 Define correlation coefficients and explain their appropriate interpretation.
- P.10 Interpret graphical representations of data as used in both quantitative and qualitative methods.
- P.11 Explain other statistical concepts, such as statistical significance and effect size.
- P.12 Explain how validity and reliability of observations and measurements relate to data analysis.

<u>Biopsychology Domain</u> Biological Bases of Behavior

Students will explore the structure and function of the nervous system in human and non-human animals and describe the interaction between biological factors and experience. Students will also describe and discuss methods and issues related to biological advances.

- P.13 Identify the major divisions and subdivisions of the human nervous system.
- P.14 Identify the parts of the neuron and describe the basic process of neural transmission.
- P.15 Differentiate between the structures and functions of the various parts of the central nervous system.
- P.16 Describe lateralization of brain functions.
- P.17 Discuss the mechanisms and the importance of plasticity of the nervous system. *Structure and function of the endocrine system*
- P.18 Describe how the endocrine glands are linked to the nervous system.
- P.19 Describe the effects of hormones on behavior and mental processes.
- P.20 Describe hormone effects on the immune system.
- P.21 Describe concepts in genetic transmission.
- P.22 Describe the interactive effects of heredity and environment.
- P.23 Explain how evolved tendencies influence behavior.
- P.24 Identify tools used to study the nervous system.

- P.25 Describe advances made in neuroscience.
- P.26 Discuss issues related to scientific advances in neuroscience and genetics.

Sensation and Perception

Students will explain the processes of sensation and perception and describe the interaction of the person and the environment in determining perception.

- P.27 Discuss processes of sensation and perception and how they interact.
- P.28 Explain the concepts of threshold and adaptation.
- P.29 List forms of physical energy for which humans and nonhuman animals do and do not have sensory receptors.
- P.30 Describe the visual sensory system.
- P.31 Describe the auditory sensory system.
- P.32 Describe other sensory systems, such as olfaction, gustation, and some thesis including but not limited to skin senses, kinesthesis, and vestibular sense.
- P.33 Explain Gestalt principles of perception.
- P.34 Describe binocular and monocular depth cues.
- P.35 Describe the importance of perceptual constancies.
- P.36 Describe perceptual illusions.
- P.37 Describe the nature of attention.
- P.38 Explain how experiences and expectations influence perception.

Development and Learning Domain

Life Span Development

Students will describe and discuss methods, issues and theories in life span development as well as prenatal development and the newborn, Infancy, Childhood, Adolescence, Adulthood, and aging.

- P.40 Explain the interaction of environmental and biological factors in development, including the role of the brain in all aspects of development.
- P.41 Explain issues of continuity/discontinuity and stability/change.
- P.42 Distinguish methods used to study development.

- P.43 Describe the role of sensitive and critical periods in development.
- P.44 Discuss issues related to the end of life.
- P.45 Discuss theories of cognitive development.
- P.46 Discuss theories of moral development.
- P.47 Discuss theories of social development.
- P.48 Describe physical development from conception through birth and identify influences on prenatal development.
- P.49 Describe newborns' reflexes, temperament, and abilities.
- P.50 Describe physical and motor development during infancy.
- P.51 Describe how infant perceptual abilities and intelligence develop.
- P.52 Describe the development of attachment and the role of the caregiver during infancy.
- P.53 Describe the development of communication and language during infancy.
- P.54 Describe physical and motor development.
- P.55 Describe how memory and thinking ability develops.
- P.56 Describe social, cultural, and emotional development through childhood.
- P.57 Identify major physical changes.
- P.58 Describe the development of reasoning and morality.
- P.59 Describe identity formation.
- P.60 Discuss the role of family and peers in adolescent development.
- P.61 Identify major physical changes associated with adulthood and aging.
- P.62 Describe cognitive changes in adulthood and aging.
- P.63 Discuss social, cultural, and emotional issues in aging.

Sociocultural Context Domain Social Interactions

Students will describe and discuss social cognition, influence, and relations.

- P.64 Describe attributional explanations of behavior.
- P.65 Describe the relationship between attitudes (implicit and explicit) and behavior.
- P.66 Identify persuasive methods used to change attitudes.
- P.67 Describe the power of the situation.
- P.68 Describe effects of others' presence on individuals' behavior.
- P.69 Describe how group dynamics influence behavior.
- P.70 Discuss how an individual influences group behavior.
- P.71 Discuss the nature and effects of stereotyping, prejudice, and discrimination.
- P.72 Describe determinants of prosocial behavior.
- P.73 Discuss influences upon aggression and conflict.
- P.74 Discuss factors influencing attraction and relationships.

Sociocultural Diversity

Students will discuss social and cultural diversity and diversity among individuals.

- P.75 Define culture and diversity.
- P.76 Identify how cultures change over time and vary within nations and internationally.
- P.77 Discuss the relationship between culture and conceptions of self and identity.
- P.78 Discuss psychological research examining race and ethnicity.
- P.79 Discuss psychological research examining socioeconomic status.
- P.80 Discuss how privilege and social power structures relate to stereotypes, prejudice, and discrimination.
- P.81 Discuss psychological research examining gender identity.
- P.82 Discuss psychological research examining diversity in sexual orientation.
- P.83 Compare and contrast gender identity and sexual orientation.

- P.84 Discuss psychological research examining gender similarities and differences and the impact of gender discrimination.
- P.85 Discuss the psychological research on gender and how the roles of women and men in societies are perceived.
- P.86 Examine how perspectives affect stereotypes and treatment of minority and majority groups in society.
- P.87 Discuss psychological research examining differences in individual cognitive and physical abilities.

Cognition Domain

Memory

Students will analyze encoding, storage, and retrieval of memory.

- P.89 Identify factors that influence encoding.
- P.90 Characterize the difference between shallow (surface) and deep (elaborate) processing.
- P.91 Discuss strategies for improving the encoding of memory.
- P.92 Describe the differences between working memory and long-term memory.
- P.93 Identify and explain biological processes related to how memory is stored.
- P.94 Discuss types of memory and memory disorders (e.g., amnesias, dementias).
- P.95 Discuss strategies for improving the storage of memories.
- P.96 Analyze the importance of retrieval cues in memory.
- P.97 Explain the role that interference plays in retrieval.
- P.98 Discuss the factors influencing how memories are retrieved.
- P.99 Explain how memories can be malleable.
- P.100 Discuss strategies for improving the retrieval of memories.

Psychological Disorders

Students will discuss perspectives on abnormal behavior and categories of psychological disorders

P.101 Define psychologically abnormal behavior.

- P.102 Describe historical and cross-cultural views of abnormality.
- P.103 Describe major models of abnormality.
- P.104 Discuss how stigma relates to abnormal behavior.
- P.105 Discuss the impact of psychological disorders on the individual, family, and society.
- P.106 Describe the classification of psychological disorders.
- P.107 Discuss the challenges associated with diagnosis.
- P.108 Describe symptoms and causes of major categories of psychological disorders including:
 - · schizophrenic
 - · mood
 - anxiety
 - · personality disorders

P.109 Evaluate how different factors influence an individual's experience of psychological disorders.

<u>Applications of Psychological Science Domain</u> Treatment of Psychological Disorders

Students will explain perspectives on and categories and types of treatment and identify legal, ethical, and professional issues in the treatment of psychological disorders.

- P.110 Explain how psychological treatments have changed over time and among cultures.
- P.111 Match methods of treatment to psychological perspectives.
- P.112 Explain why psychologists use a variety of treatment options.
- P.113 Identify biomedical treatments.
- P.114 Identify psychological treatments.
- P.115 Describe appropriate treatments for different age groups.
- P.116 Evaluate the efficacy of treatments for particular disorders.
- P.117 Identify other factors that improve the efficacy of treatment.

P.118 Identify treatment providers for psychological disorders and the training required for each.

P.119 Identify ethical challenges involved in delivery of treatment.

P.120 Identify national and local resources available to support individuals with psychological disorders and their families including NAMI and support groups.